

**Application No.:** 10/767,476  
**Filing Date:** January 28, 2004

## **SUMMARY OF INTERVIEW**

### Attendees, Date and Type of Interview

A personal interview was conducted on May 5, 2008. The interview was attended by Examiner Amber Steele and Jerry L. Hefner. Applicants' representative Dr. John Murphy attended the interview via telephone.

### Identification of Claims Discussed

Independent claims 29 and 41 were discussed.

### Identification of Prior Art Discussed

Pinkel et al. and Walt et al. were discussed.

### Proposed Amendments

Applicants' representatives proposed amending the claims to recite that the second substrate comprises projections having array locations.

### Principal Arguments and Other Matters

It was argued that neither Pinkel et al. nor Walt et al. disclose every element of the independent claims presented for examination. Applicants also argued that the provisional obviousness-type double patenting rejection was inapplicable to currently claimed compositions.

### Results of Interview

The Examiner agreed that provisional obviousness-type double patenting rejection would be withdrawn and that phrasing the claim as proposed would clarify the novelty of the claims in view of the cited references.

### REMARKS

Claims 29-75 are currently pending. Claims 1-28 are canceled and claims 60-75 are withdrawn without prejudice or disclaimer. Applicants reserve the right to pursue the subject matter of any or all of the canceled or withdrawn claims in one or more continuing applications.

Claims 29-59 are currently presented for examination. Independent claims 21 and 41 as well as dependent claims 36-40, 46-51 and 55 are currently amended. Support for the amendments to claims 21 and 41 can be found in the claims and specification as originally filed. In particular, support for the amendments to independent claims 21 and 41 can be found at page 4, lines 10-22, page 6, lines 25-35, page 13, lines 4-14; at Figure 1A, Figure 1B and Figure 8; and elsewhere throughout the specification as originally filed. Dependent claims 36-40 and 46-50 are amended to maintain antecedent basis with respect to amended elements of the independent claims. Claims 51 and 55 are amended to correct typographical errors. Accordingly, no new matter is added to the instant application.

#### Rejection of claims 29, 30, 35, 37-39, 41, 45, 47-49 and 51-59 under 35 U.S.C. § 102(b)

The Examiner rejects claims 29, 30, 35, 37-39, 41, 45, 47-49 and 51-59 under 35 U.S.C. § 102(b) as allegedly anticipated by PCT Application Publication No. WO97/27326 (Pinkel et al). In particular, the Examiner asserts that Pinkel et al. disclose a first substrate comprising a plurality of assay wells and a second substrate comprising "a plurality of array locations comprising a plurality of projections (i.e. fiber optic bundles and/or individual fiber optic strands) comprising different biological binding partners (i.e. bioactive agents) which can be 'dipped' into the wells." The Examiner further asserts that Pinkel et al. also disclose additional limitations recited in the dependent claims.

Applicants submit that claims 29, 30, 35, 37-39, 41, 45, 47-49 and 51-59 are not anticipated by Pinkel et al. Even prior to the current clarifying amendments, these claims were not anticipated by Pinkel et al. As discussed in the interview of May 5, 2008, Pinkel et al. neither disclose a first substrate having a plurality of assay locations nor do they disclose a second substrate comprising an array location on a projection, wherein the array location has discrete sites, and wherein the sites comprise different bioactive agents.

Applicants also submit that Pinkel et al. do not anticipate claims 29, 30, 35, 37-39, 41, 45, 47-49 and 51-59 as currently written. In particular, Applicants have amended independent claims 29 and 41 to further clarify the nature of the second substrate. Specifically, independent claim 29 now recites “a second substrate comprising a plurality of projections, each projection comprising an array location having a plurality of discrete sites, wherein said sites comprise different bioactive agents, and wherein said plurality of projections is configured to be dipped from above into said plurality of assay wells comprising samples.” As discussed in the interview of May 5, 2008, Pinkel et al do not disclose arrays made up of two substrates. In addition, Pinkel et al. do not disclose an array substrate having a plurality of projections meeting the limitations of the second substrate in independent claim 29. Rather, Pinkel et al. describe a single substrate array made of a single fiber optic bundle, wherein each fiber of the fiber optic bundle has a plurality of identical bioactive agents bound thereto. Thus, if the fiber optic bundle is considered to be a projection and the end of the fiber optic bundle is considered to be an array location, then Pinkel et al. does not disclose “a second substrate comprising a plurality of projections, each projection comprising an array location” as recited by claim 29. Alternatively, if each fiber of the fiber optic bundle disclosed by Pinkel et al. is construed as a projection, it is clear that the sites at the end of each fiber do not comprise different bioactive agents bound thereto. These same arguments apply to independent claim 41, which includes, in relevant part, the same limitations as claim 29. Accordingly, Pinkel et al. do not disclose each and every element of independent claim 29 or 41.

In view of the foregoing remarks, Applicants respectfully request that the Examiner withdraw the rejection of claims 29, 30, 35, 37-39, 41, 45, 47-49 and 51-59 under 35 U.S.C. § 102(b).

Rejection of claims 29-59 under 35 U.S.C. § 103(a)

The Examiner rejects claims 29-59 under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 6,406,845 (Walt et al.) in view of U.S. Patent No. 6,132,685 (Kercso et al.) and Walt et al. in view of U.S. Patent No. 6,327,410 (Walt-2 et al.). In particular, the Examiner asserts that Walt et al. disclose “a first substrate (i.e. eppendorf tube) comprising oligonucleotides or sample” and “a second substrate comprising a plurality of array locations (i.e.

multiple optic fibers; projections) comprising different oligonucleotide probes (i.e. DNA, RNA, PNA; bioactive agent) which are dipped, submerged or placed in an eppendorf tube.” The Examiner asserts that Walt et al. do not describe dipping the fiber optic bundles into a microtiter plate, but alleges that a skilled artisan would have substituted microtiter plates allegedly disclosed by Kercso et al. for the eppendorf tube disclosed by Walt et al. Furthermore, the Examiner asserts that, in order to obtain a rapid deposition and high density of probes at the end of each fiber, a skilled artisan would have been motivated to combine the disclosure of Walt et al. with that of Walt-2 et al. so as to arrive at fiber optic bundles, wherein the fibers comprise microspheres. The Examiner then contends that the skilled artisan would have had a reasonable expectation of success in such modification in view of the teachings of Walt-2.

Applicants submit that claims 29-59 are not obvious in view of the above-cited references. Even prior to the current clarifying amendments, these claims were not rendered obvious by the above-cited art. As discussed in the interview of May 5, 2008, Walt et al. do not disclose a substrate comprising array locations on a projection having discrete sites, wherein the sites comprise different bioactive agents. Furthermore, none of the secondary references teach or suggest modification of Walt et al. so as to arrive at this element.

Applicants also submit that none of the above-cited references render obvious claims 29-59 as currently written. As discussed above, Applicants have amended independent claims 29 and 41 to further clarify the nature of the second substrate. Specifically, independent claim 29 now recites “a second substrate comprising a plurality of projections, each projection comprising an array location having a plurality of discrete sites, wherein said sites comprise different bioactive agents, and wherein said plurality of projections is configured to be dipped from above into said plurality of assay wells comprising samples.” As discussed in the interview of May 5, 2008, even if the disclosure of Walt et al. is construed as proposed by the Examiner (i.e., a single fiber is equivalent to a projection as set forth in claim 29), it is clear that the sites at the end of each fiber do not comprise different bioactive agents bound thereto (see, for example, Figure 22A as well as the entire specification of Walt et al.). Because none of the secondary references teach or suggest modification of Walt et al. so as to arrive at this element, neither claim 29 nor any claim dependent thereon is rendered obvious over the above-cited references. This same argument applies to independent claim 41 and claims dependent thereon, all of which include, in

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relevant part, the same limitation as claim 29. Accordingly, none of claims 29-59 are obvious over the above-cited references.

In view of the foregoing remarks, Applicants respectfully request that the Examiner withdraw the rejection of claims 29-59 under 35 U.S.C. § 103(a).

Rejection of claims 29-59 under the doctrine of obviousness-type double patenting

The Examiner rejects claims 29-59 under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, 7-9, 12-18 and 24-30 of U.S. Patent No. 6,429,027 (the '027 patent). In particular, the Examiner asserts that claims 29-59 are not patentably distinct from the above-recited claims of the '027 patent.

Applicants maintain that claims 29-59 are not obvious over claims 1-4, 7-9, 12-18 and 24-30 of the '027 patent; however, solely in order to expedite the allowance of the claims of the instant application, Applicants file a terminal disclaimer herewith.

Provisional rejection of claims 29, 35, 39-41, 45 and 49-58 under the doctrine of obviousness-type double patenting

The Examiner provisionally rejects claims 29, 35, 39-41, 45 and 49-58 under the doctrine of obviousness-type double patenting over claims 1-7 and 16-23 of copending U.S. Patent Application No. 10/363,104 (the '104 application). In particular, the Examiner asserts that the claims of the '104 application "are drawn to arrays comprising a (first) substrate with wells and a second substrate or cells with bioactives on the surface," and thus, claims 29, 35, 39-41, 45 and 49-58 of the instant application are not patentably distinct.

Applicants maintain that claims 29, 35, 39-41, 45 and 49-58 are not obvious over claims 1-7 and 16-23 of the '104 application. As agreed in the interview of May 5, 2008, claims 1-7 and 16-23 of the '104 application do not disclose or suggest two substrate array wherein the second substrate comprises "a plurality of projections, each projection comprising an array location having a plurality of discrete sites, wherein said sites comprise different bioactive agents, and wherein said plurality of projections is configured to be dipped from above into said plurality of assay wells comprising samples" as recited in independent claims 29 and 41. Accordingly, independent claims 29 and 41 are not obvious over claims 1-7 and 16-23 of the '104 application.

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Because claims 35, 39, 40, 45 and 49-58 are dependent on claim 29 or 41, none of these claims are obvious over 1-7 and 16-23 of the '104 application.

In view of the agreement reached during the interview of May 5, 2008, Applicants respectfully request that the Examiner withdraw the provisional obviousness-type double patenting rejection of claims 29, 35, 39-41, 45 and 49-58 over claims 1-7 and 16-23 of the '104 application.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

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### CONCLUSION


Applicants believe that all outstanding issues in this case have been resolved and that the present claims are in condition for allowance. Nevertheless, if any undeveloped issues remain or if any issues require clarification, the Examiner is invited to contact the undersigned at the telephone number provided below in order to expedite the resolution of such issues.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

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